

CLAIMS:

1. A DNA construct which comprises DNA encoding one or more human cytomegalovirus proteins selected from the group consisting of pp65, pp150, IE1, gB and antigenic fragments thereof, wherein each of said human cytomegalovirus proteins individually optionally is modified by N-terminal ubiquitination, N-end modification or both, and wherein said human cytomegalovirus protein or antigenic fragment thereof optionally contains a lysine-containing adapter sequence.
2. A protein encoded by the DNA construct of claim 1.
3. A vaccine virus vector which comprises a DNA construct of claim 1.
4. A vaccine virus vector of claim 3 which is vaccinia virus.
5. A vaccine virus vector of claim 3 which is Modified Vaccinia Ankara virus.
6. A Modified Vaccinia Virus vaccine vector which comprises DNA encoding one or more human cytomegalovirus proteins selected from the group consisting of pp65, pp150, IE1, gB and antigenic fragments thereof, wherein each of said human cytomegalovirus proteins individually optionally is modified by N-terminal ubiquitination, N-end modification or both, and wherein said human cytomegalovirus protein or antigenic fragment thereof optionally contains a lysine-containing adapter sequence.

7. A Modified Vaccinia Virus vaccine vector of claim 6 which comprises Ub-R-pp65, Ub-R-pp150, Ub-R-IE1(4) and gB(s).

8. A method of vaccinating a person in need thereof against human cytomegalovirus which comprises administering to said person an effective amount of the construct of claim 1.

9. A method of vaccinating a person in need thereof against human cytomegalovirus which comprises administering to said person an effective amount of the vaccine virus vector of any of claims 3, 6 or 7.

10. A method of augmenting immunity against human cytomegalovirus in a person in need thereof which comprises administering to said person an effective amount of the construct of claim 1.

11. A method of augmenting immunity against human cytomegalovirus in a person in need thereof which comprises administering to said person an effective amount of the vaccine virus vector of any of claims 3, 6 or 7.

12. A DNA construct of claim 1 which comprises DNA encoding:

(a) ubiquitinated, N-terminal arginine, phosphokinase-deleted pp65;

(b) ubiquitinated, N-terminal arginine pp150;

(c) ubiquitinated, N-terminal arginine IE1 exon 4; and

(d) transmembrane domain-deleted gB.